EXHIBIT A

UNITED STATES DISTRICT COURT

DISTRICT OF MINNESOTA

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In Re:

Bair Hugger Forced Air Warming

Products Liability Litigation

This Document Relates To:

All Actions MDL No. 15-2666 (JNE/FLM)

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DEPOSITION OF MICHAEL A. MONT

VOLUME I, PAGES 1 - 369

JULY 28, 2017

(The following is the deposition of MICHAEL A. MONT, taken pursuant to Notice of Taking Deposition, via videotape, at the offices of Weisman, Kennedy & Beris, 101 West Prospect, Cleveland, Ohio, commencing at approximately 9:14 o'clock a.m., July 28, 2017.)

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I N D E X

P R O C E E D I N G S

(Witness sworn.)

MR. B. GORDON: Do you want to make appearances for the record?

Ben Gordon, Ben Gordon for the plaintiffs.

You guys want to put your appearance on the record?

MR. ASSAAD: Gabe Assaad for the plaintiffs.

MR. COFFIN: Chris Coffin for the plaintiffs.

MR. C. GORDON: Corey Gordon for the defendant.

MR. GOSS: Peter Goss for the defendant.

MS. HINES: Micah Hines or the defendant.

MICHAEL A. MONT

called as a witness, being first duly sworn, was examined and testified as follows:

ADVERSE EXAMINATION

BY MR. B. GORDON:

Q. Good morning, Dr. Mont. My name is Ben Gordon and we met a few minutes ago; did we not?

A. Yes, we did.

Q. You've had your deposition taken before I understand; right?

A. I have.

speaking objection. You got onto me about it.

Q. So doctor, I'm going to repeat the question. I don't think it's argumentative.

A. Okay.

Q. The question is whether, in your report, you listed a number of different operating room devices that you believe are things that have to be looked at with respect to potential contamination of the operating room environment. Isn't that what you said on page four?

A. It -- I used a --

Yeah. You're using the term "devices." Some of these things are -- I don't know what the definition that you have of "devices" -- some of them are blades, --

Q. Well doctor, you said --

A. -- tips -- suction tips. I mean they can all be considered devices. Some of them are operating room traffic. I just -- I just listed a melange of things in the orthopedic theater that are used that are exogenous sources of -- potential exogenous sources of contamination in the operating room theater and --

But I'm happy to answer any question you're asking.

Q. Let me read your -- let me read your sentence exactly, doctor, so it's clear for the jury. And I want you to listen for me here and ask you where you limit this to orthopedic cases.

Top of page four, quote, "The operating room environment has a multitude of sources of potential contamination. This should be minimized, as much as possible, by not prolonging surgeries unnecessarily to minimize further skin or wound contamination, minimizing operating room traffic, and being careful about contamination of necessary equipment, e.g. suction tips, blades, saws, light handles, et cetera."

Anywhere in those two sentences did you limit your concern about the operating room and potential contamination to just orthopedic cases?

MR. C. GORDON: Object to the form of the question, --

A. I -- I --

MR. C. GORDON: -- it mischaracterizes -- wait, wait, wait -- mischaracterizes the -- the -- the evidence, takes it out of context. And the entire section is about periprosthetic joint infections.

MR. B. GORDON: Object to counsel's side-bar and testifying for the witness.

A. I -- I would have answered it without his

prompting in two manners. I would have said that the -- what we said, the bold part of this topic is periprosthetic joint infections, so what I'm saying in here primarily applies to -- to joint arthroplasty surgeries, which is the major topic of this whole case, which is what we're talking about. That would have been my first answer. But the second part is when you were reading it carefully to me, I was listening and reading it again carefully. Would I agree with almost all of those statements being correct in a generic sense for the operating room? I didn't write it in that -- I -- I was writing this more for orthopedics and for joint arthro -- arthroplasty when I wrote that. I know how I was thinking because I was just imagining myself doing a joint arthroplasty case, and that's how I wrote it. I didn't write this from a book.

You're asking for references sometimes. Some of these -- some of these statements here in this -- even in this whole section, they're not referenced because it's from my knowledge. I believe a lot of it is common knowledge like what I put in there. But if I read that, unless we nitpick this on something else, I think that statement also applies in general to any surgery.

Q. Doctor, you would agree -- and I think you did earlier -- with the proposition that patient warming devices are potential external sources of contamination in the operating room; --

MR. C. GORDON: Object to the form --

Q. -- correct?

MR. C. GORDON: Object to the form of the question.

Q. In orthopedic cases.

A. No, I don't agree with that.

Q. So you don't agree that patient warming devices are among the pieces of equipment in the operating room, like this litany of others you list, that could be sources of contamination in orthopedic surgery cases?

A. Well you want to go one by one? What are we defining as patient warming devices? If you bring -- if you bring a little hot -- if you bring a little IV fluid that's a little warm and you call that a patient warming device -- which it shouldn't be, it shouldn't be used for that purpose -- and the thing is contaminated, it could cause bacteria. Is that what --

I mean I don't understand what the question is.

I can't say no. Other orthopedists may talk about what you're talking about, but I haven't witnessed the thousands and thousands of orthopedic surgeons that I encounter talking about that.

Q. You mentioned that the Mistral has a HEPA filter whereas the Bair Hugger does not; correct?

A. Correct.

Q. And that's a higher level of filtration, the HEPA filter, than the MERV 14 filter or the M20 filter, or however you want to describe it, that is in the Bair Hugger; isn't that right?

A. I don't know how you're defining "higher level." You -- you're defining it filters a certain amount -- it --

It does have a higher filtration efficiency for certain size particles, if that's how you are defining "higher level."

Q. Are you an expert on filtration efficiency, doctor?

A. No, I'm not an expert on filtration efficiency.

Q. You're not an engineer; right?

A. I am not an engineer.

Q. Have you ever designed a patient warming system of any kind?

Q. Okay. You talk in your report about the Bair Hugger and describe it as being far away from the patient or far away from the sterile field. Do you recall that?

A. Yes.

Q. How far away is the exhaust of the Bair Hugger from the patient typically in your operating room?

MR. C. GORDON: Object to the form of the question.

Q. And when I say that, in the past, obviously.

MR. C. GORDON: Same objection.

A. I can't give you an exact number, but it's -- I would say it's in feet, --

Q. And --

A. -- two feet or more.

Q. Is it your testimony before this jury today that a device that is -- that is within feet of the patient, it's okay with you as the orthopedic surgeon doing those ultraclean prosthetic joint surgeries to have a machine that has known contamination in the machine in that context? Is that acceptable to you as a surgeon?

MR. C. GORDON: Object to the form of the question.

A. I have machines that are within inches that have known contamination, and we have to deal with that. So this is well further away and draped off. It's so far removed compared to a number of other things that are within inches --

Q. And you're concerned about --

A. -- or -- or less in the field.

Q. Sorry.

A. I'm always concerned about everything, but not --

Q. Not the Bair Hugger.

A. It's so -- it's far removed and it's -- it's --

If I put on my list of concerns, if we say that anything is game, if we want to do it that way, then I -- I can probably make a list for you and put it as number 27 out of 28.

Q. Okay. So -- so it's on the list, it's just way down the list.

A. I wouldn't even put it on the list.

Q. Well you didn't in your report; did you?

A. I don't think it's operative.

Q. You put a litany of things on --

A. Some things, I think that if you -- I think that if you -- if you go into Burger King and you have

happened over the weekend where there was like a damage to a wall, and they shut down the whole OR, one of our orthopedists. So they are to me obsessively compulsive about the details of what you just asked about everything. I've seen that with them. So there are people doing that. I'm just not involved in that.

Q. Have you ever opera -- I'm sorry -- designed an operating room manual for oper -- let me --

MR. B. GORDON: That's bad, Dick. Let me start over.

Q. Have you ever designed an operating room?

A. The closest I could say to designing an OR is when I would do surgery on animals in the '90s and we had to figure out which room we were going to use to operate on rabbits or dogs and say, "Is this ideal?" And I'd get an anesthesiologist and my vet and we'd sit there and we'd look at different rooms and say where do we think it's best. So maybe that's a facetious answer, but the answer is no --

Q. So would you --

A. -- in a general sense.

Q. Thank you, doctor.

Based on that answer, would you defer to experts on operating room design about the ventilation systems used in those operating rooms?

A. Absolutely.

Q. Okay. Fair enough.

You're not a member of ASHRAE. You know what ASHRAE is?

A. I -- I don't --

I can't give you give you the whole eponym, but yes --

Q. And --

A. -- that determines the standards for --

Q. -- NIOSH is another one.

A. I don't even know that one. I'm just --

Q. Okay. What about the American Institute of Architects who help design hospitals, you -- you a member of that?

A. No, I'm not a member of that.

Q. All right. Let me ask you if you -- if you agree or disagree with this statement. I'm going to give you two statements. Number one: "Infection control is critical in ORs." Agree or disagree?

A. Have to hundred percent agree.

Q. Number two: "Studies have demonstrated that most of the causes of wound contamination in the OR are the result of the patient's skin flora and bacteria shed on airborne particles from the OR personnel." Agree or disagree?

clear.

A. Well my own patient is two out of 10, --

Q. Okay. Two out of 10.

A. -- Carter and Cherrak.

Q. Okay. Doctor, you're not an infectious disease doctor; are you?

A. No.

Q. You don't hold yourself out as an expert in microbiology or infectious disease?

A. I don't hold --

I hold myself to the extent, as an orthopedic surgeon, I have to deal with infections and have published a lot on infected hip and knee replacements, which are relevant to the case, to that extent I'm to some extent an expert. As a -- as a pure infectious disease person, microbiologist, no, I'm not an expert.

MR. B. GORDON: Fair enough. Thank you, doctor. We can take lunch.

THE REPORTER: Off the record, please.

(Luncheon recess taken.)

MR. ASSAAD: Okay.

MR. C. GORDON: -- as eight.

MR. ASSAAD: Withdraw the question.

Q. You've studied periprosthetic joint infections; correct?

A. Yes.

Q. You've actually done studies and have published on the issue; correct?

A. Yes.

Q. And you --

And sitting here today, you can't cite a study without looking at Exhibit A, off the top of your head, of any study that shows that normothermia reduces the risk of periprosthetic joint infection.

If you can't, you can't, sir.

A. For a real answer, there are some things that if it's already been confirmed in other specialties, it would be unconscionable -- by all three definitions of the word -- to actually do a study would be unethical, unconscionable. You couldn't get patients to do a study like that. And because of all the problems that not maintaining normothermia would ensue, there wouldn't be a study like that. In addition, we know that the lack of normothermia will lead to hematomas and bleeding

So --

MR. C. GORDON: Okay. You know, Gabe, I just want to point out, in that question you asked "literature that supports." He was giving you a -- a -- a fairly detailed explanation of the literature that supports normothermia's relationship to periprosthetic joint infection. You may not like it, you may not think it's responsive, that's fine, --

MR. ASSAAD: I want --

MR. C. GORDON: -- just let him finish.

Q. So -- so I want the name of the literature.

A. So I'm -- I'm not going to -- to --

My answer is normothermia promotes tremendous health benefits to the patients that have been studied outside of orthopedics. I would have to look specifically in ortho and see the -- indirectly how it's shown that, but it wouldn't be something studied because of what -- that specific topic because we know that normothermia promotes so many other beneficial effects. And in fact you asked me for a study and you didn't -- and I don't have to even tell you what I mean by "a study," so I know that published literature is considered studies by many people, so that consensus statement by -- by Parvizi would count, so would the CDC recommendation to reduce

infections -- periprosthetic infections by maintaining normothermia, that would count. And for all the benefits of normothermia, I don't like a -- an answer that would be taken out of context, so I will maintain that answer.

Q. Do you have an understanding of whether or not using forced-air warming has an effect on hypothermia during the first hour of surgery?

A. I can't give you every detail of it. I would expect that FAW can help --

I'm trying to think of different studies that looked at timing of forced-air warming. But again, that's not what I was called to be the expert. There are other experts on the device.

Q. And -- and I agree to that. And you --

So you would agree that you are not an expert with respect to maintaining normothermia and its effect on -- all its effects on surgical outcomes.

A. There are articles I've written that show that the FAW was very eff -- extremely effective at maintaining normothermia. There are a number of published reports; they are part of that exhibit that's in there. And it's been recommended by association of the nurses. A lot has been written about it. So -- and -- and there are a number of

Q. Turning to page five of your deposition dealing with the paragraph that starts "The impact of ventilation" --

MR. GOSS: His report?

MR. ASSAAD: I'm sorry. Correct, your report, Exhibit 5. Page five Exhibit 5. Thank you, Corey.

Q. You don't hold yourself out as a ventilation expert; correct?

A. I am not a ventilation expert. I know of ventilation to some extent, but --

Q. Okay. You wouldn't know how an operating room ventilation works and maintains positive pressure and the types of filtration used.

A. I would know that --

For example, at this consensus conference I was asked questions about the -- the success rate of laminar flow versus ultraviolet versus turbulent versus -- what was the other one -- versus something else. I had to actually give a few statements, so --

Q. Did you say ultraviolet? You meant ultra -- ultraclean?

A. UV radiation.

Q. Okay.

A. Okay. So I had to prepare little statements

on the literature at the time. Now that doesn't make me an expert, it just makes me looking at results of like New Zealand Registry about laminar flow and cup -- and I also had to look up space suits, so -- which were related, combination of laminar flow with space suits and the risk of periprosthetic infection for -- I did a little bit of that work for the consensus conference.

Q. Do you know what a Reynolds number is?

A. A what?

Q. A Reynolds number.

A. I've heard of a Reynolds number, but no, I'm not --

Q. Do you know what the Navier-Stokes equations are?

A. No, I don't.

Q. Do you know -- do you know what the Archimedes number is?

A. I know who Archimedes is, but I don't know what the Archimedes --

Q. Do you know --

A. -- number is.

Q. Do you know the difference between a lam -- what the Reynolds number would indicate, to know the difference between what's a laminar flow and a

turbulent flow?

A. These are the parts that I'm not an expert on, and that's why you see that certain -- certain --

I don't spend that much time on that part. That's not -- I'm not --

On the part of what you're asking me is infection rates with laminar flow versus turbulent flow, but not knowing how many cycles of -- of -- are -- are -- of air are coming per minute or at a certain point, what is disrupting the -- the turbulent flow or the laminar flow, what -- what's the effect of people going into the flow rate and things like that, that is not my expertise, which is I -- what I think you're asking.

Q. So sitting here today, would you agree with me that you don't have the expertise to indicate if any medical device that blows air, its effect on the airflow in an operating room?

MR. C. GORDON: Object to the form of the question, misstates his testimony.

A. I think I have been aware when something is blowing air in my face in the OR or things like that on a gross level, and on -- and on a micro level or a --

I have read these articles that are

people said. "We don't want the door opened or shut. We want no air currents from opening or shutting the door, and we don't want people walking around and throwing more currents." And that was stated by our -- our infectious disease experts --

Q. So --

A. -- in those periods of time when we wanted to reduce infections.

Q. So you're relying on what the infection disease experts told you in Baltimore in your opinion.

A. That, and reading articles, --

Q. What --

A. -- speaking to people, expert -- expert, and I think there's also some of -- some statements by the CDC. As well as this consensus statement mentions that, reducing that.

Q. But you have no education with respect to --

You're not an engineer; correct?

A. I already answered that question. I am not an engineer.

Q. Okay. And you -- and you have not done any --

You have no education with respect to how objects that move affect airflow; correct?

A. What do you mean I have no education?

Q. Well what --

A. Formal education? Scientific? I didn't write a --

Q. Do you take -- do you take --

Did you ever take a class on fluid dynamics?

A. No, I did not.

Q. Did you ever have a class on heat transfer?

A. No.

Q. Okay. I mean air -- air -- the -- you have --

You have no expertise to indicate whether or not someone moving in the operating room will affect the unidirectional or downward airflow of a ventilation system; do you, sir?

A. I -- I can read an article and see --

When the article that says a person moving into the room, their head moving this way or that affects laminar flow and causes laminar flow currents to become disrupted or can affect that, I'm -- I may not have an engineering degree, but I'm able to read certain articles, discuss different things with different people and, in my idea, form an opinion. That doesn't mean I have to know Reynolds numbers or be an engineer to be able to form an opinion.

Anyone, even if you are an engineer, these

are opinions, but I think that some of this makes sense.

Q. So --

A. It's a logic thing. Some of these things you do want to have an engineering degree to understand and calibrate ORs the correct way, I agree with you on that, but some of them --

Clearly, if you have people running around the OR and creating -- and waving their hands, that's not optimal for surgery.

That would be an exaggeration.

Q. What's the velocity of air that's created by waving your hand?

A. I can't give you an exact number right this moment.

Q. So my understanding is if I read an orthopedic article, that makes me an expert in that area of orthopedics --

MR. C. GORDON: Object to the form of the question.

Q. -- by just reading the article?

MR. C. GORDON: Object to the form of the question.

A. I never said that.

MR. C. GORDON: Also lack of foundation.

Q. Huh?

A. I never said that.

Q. Well, you're relying on articles you've read, correct, even though they're outside your expertise?

A. I'm -- I'm allowed to have an opinion about many topics that are outside my expertise. As an orthopedic surgeon, as I said earlier, I can't divorce -- even though I'm not an infectious disease expert or microbiologist, I can't divorce myself from knowledge in taking care of the patients that have infections and working with the microbiologists, infections from the surgeons' points of view, and it -- you work as teams, but it is important for me to have a working knowledge of a lot more topics than are in my exact field of expertise past just general orthopedics or joint -- joint reconstruction about orthopedics. That would be my answer.

Q. Okay. On number eight you type -- you -- you say, "Many pieces of equipment in the OR generate air currents, including those that have cooling fans."

What devices are you referring to?

MR. C. GORDON: Where is that?

MR. ASSAAD: Number eight.

MR. C. GORDON: Oh.

A. There -- there's a device where -- that irrigates wounds. We have a flow tube that goes into the wound that has a cooling fan on it.

Q. Is the cooling fan directed onto the surgical site?

A. No.

Q. Okay.

A. No. It's away from. But it has --

Q. And what's the CFM of that cooling fan, do you know?

A. I wouldn't know that.

Q. Okay. What other device?

A. I mean I can find any of these things out for you, but that's not to me relevant to knowing that. Maybe you find it was.

Q. Okay. What other device, sir?

Monitors?

A. Well those are further -- I'm not going to even think about those. But further away from the field are anesthesia machines, at least one or two, and they're going to have cooling fans that would be -- you'd want to maintain the temperature.

Q. Any evidence that indicates that the cooling fans of an anesthesia machine has caused a surgical-site infection or periprosthetic joint

infection?

A. Not to my knowledge.

Q. Okay. What else, sir?

A. Irrigation device, cautery.

I don't know if the electrocautery machine has something in it that has -- it's a piece of machinery, it can't get overheated. I --

Has some mechanism for maintaining cooling in the machine itself because it's plugged in. I don't --

Q. Are you speculating or --

A. I don't know if it's a fan or not.

Q. -- you -- or are you -- are you --

Do you say that to a reasonable degree of probability, that you are certain that the electrocautery device has some sort of cooling mechanism?

A. I'm speculating --

Q. Okay.

A. -- there, but I would believe that's the case.

Q. Well let's not speculate. And I think counsel will agree with me that you're not here to guess or speculate. If you don't know the answer --

A. All right. I'll -- I'm going to think about

Okay.

Q. Do you have an opinion -- strike that. What is the -- the --

With respect to all people in the operating room, which is pretty much items one through five, do you know what volumetric flow is created when a person walks?

A. No.

Q. Okay.

A. I can --

Happy to look that up for you if you really want me to know that.

Q. Do you know whether or not that volumetric flow would have an effect on the ventilation airflow over the surgical site?

A. I would --

Based on what I've read and what I would think, it could have an effect.

Q. Okay. How much -- how much airflow, volumetric airflow would be required to disrupt the unidirectional airflow in an operating room over the surgical site?

A. Of which type of ventilation?

Q. A unidirectional airflow coming down at about --

A. Turbulent airflow or laminar or -- or what -- what --

I mean they're all different. Some of them are horizontal laminar, some of them are vertical laminar.

Q. Unidirectional vertical laminar -- or unidirectional flow. Well strike that.

Do you believe that there are any operating rooms that have laminar flow?

A. Do I believe what?

Q. Is there any operating room that actually has laminar flow?

A. I don't know what your question is, but there are -- there are many operating rooms that feel they use laminar flow, yes.

Q. All right. What about in the United States?

A. Yes.

Q. Do you use laminar flow?

A. No.

Q. Do you use unidirectional flow?

A. I don't know your def -- definition of it.

Q. Okay.

A. We don't call it that.

Q. Okay. Well for downward unidirectional flow, turbulent if you want to define it, do you know

what volumetric flow is required --

(Mr. C. Gordon sneezes.)

Q. -- to disrupt --

THE WITNESS: Gesundheit.

Q. -- to disrupt the protective effect of the unidirectional airflow in an operating room?

A. No.

Q. Okay. Would number seven, "Moving of lights and other equipment directly creates waves or currents by individual (surgeon or team), as well as the specific object moving," do you know what volumetric airflow is created when you move lights?

A. No.

Q. Okay.

A. I'd be happy to find out if you really think that's important.

Q. Do you know how --

Do you know what the volumetric flow rate coming out of a Bair Hugger?

A. I don't want to say the wrong number, so the answer is no.

Q. Okay. Do you know what -- how much heat is produced by a Bair Hugger?

A. I have numbers in my head of what was said in articles.

Q. Okay. What's the number?
A. Some number like 800 milliwatts.
Q. Eight hundred milliwatts?
A. Milli, but the unit may be wrong.
Q. Okay.
A. But I know that in relation to what is generated in a ratio per -- per person on the operating room team.
Q. How -- how many milliwatts does a person create?
A. On the same ratio, if the number without the units is 800, then a person is a -- is a bit over 200.
Q. Okay.
A. And these -- okay.
Q. And have you actually looked at the operating manual or the -- of a Bair Hugger?
A. At some point, yes, but not very -- not in any specifics that I would comment on.
Q. I mean it's not listed on any of the stuff you considered; correct?
A. No.
Q. Correct?
A. That's not my field. That's not my -- as you would say, that's not my area of expertise. And other people can comment on that.

burn your finger.

Q. And you agree with me that the heat that is being produced by the saw blade is above the operating room table.

A. It's above --

It's in the patient's wound, so anything in the patient's wound is above the table.

Q. Okay. And do you know how much heat the batteries that power the saw blades create?

A. I don't know the exact number. We --

Q. And you -- you --

A. We can get that, but there is certainly heat.

Q. And you --

A. The whole -- the whole --

Not only the battery and the saw blade, but the whole instrument can get, as you're using it more time and it's turned on, the whole thing can get really hot.

Q. And that -- that heat is generated above the operating room table; correct?

A. Correct.

Q. Okay. And the battery pack that -- that -- that use the space -- that are on the spacesuits, they're right behind the head of the -- the surgeons,

the people that use them; correct?

A. They're behind the head, or they can be hanging down on the shoulder --

Q. Okay.

A. -- across the lower black.

Q. But they're also above the operating room table; correct?

A. Yes.

Q. Okay. Do you know how much heat they produce?

A. No.

Q. Okay. The general overhead lights in an operating room, you agree that the heat they -- they produce is above the operating room table; correct?

A. Yes.

Q. Do you know how much heat they produce?

A. Often a watt, but I can't tell you how much.

Q. Okay. The focused overhead lights directly at field, those are above the operating room table; correct?

A. Yes.

Q. And the heat they produce is above the operating room table; correct?

A. Yes.

Q. And do you know how much heat they produce?

A. No.

Q. Okay. The ancillary hooded lights that many surgeons wear and the light generating unit, that's -- that's -- that's above the operating room table; correct?

A. Yes.

Q. Do you know how much heat they produce?

A. No.

Q. Okay. Do you know how much heat a patient produces?

A. I should know and I did know at one point, but I don't know exactly.

Q. Okay.

A. I'm -- I'm sure that's variable depending on the -- the patient.

Q. And you told me before with respect to the surgeons and the people that are moving around, that's roughly about 200?

A. To the best of my knowledge.

Q. Okay.

A. I will --

Q. All right.

A. I will recheck that.

Q. The machine to process fluid -- irrigation fluids, vacuum canisters and more substantial

canisters used nowadays that generate much heat, do you know how much heat they produce?

A. I don't know the exact number.

Q. Okay. Do you know whether or not they produce heat underneath the operating room table?

A. Well they are on the floor, so if you want to say under or pretty close to the bottom of the operating --

They start from the floor, they're -- they're sitting on the floor and they go upwards, so they're -- so that would be the closest of all these answers to being on the floor or below the operating room table, those -- that.

Q. Well you -- you -- you mentioned that you read -- on your invoice you saw the report of --

Did you receive a copy of -- oh, here it is -- Settles paper? You read the Settles paper; correct?

A. Very briefly I did.

Q. Fifteen minutes; right?

A. Yes.

Q. Were you aware that he measured that the temperature increased underneath the operating room table when the Bair Hugger was used?

A. I'd have to look at this report with you. I

wasn't -- I don't remember being -- I don't --

Q. By the way, when did you get the expert reports of Settles, Abraham, Lampotang, Hughes, Holford, the defense experts?

A. You want the exact date?

Q. Was it -- was it this month?

A. No. It was in June.

Q. Okay.

A. Somewhere like June 10th. So I -- I read these about a month ago, that's why I can't give you an exact answer.

Q. Number nine --

A. On the Settles paper, which I had read, 15 minutes was carefully enough for me to read that paper.

Q. By the way, do you feel any air come out of the Bair Hugger when you use it?

A. No.

Q. What about the --

A. Oh. Do I feel it when I'm in the case or --

Q. Yes.

A. -- do I feel it right there?

Q. When you're in the operating room.

A. No.

Q. Do you see air coming out of the neck, like

flapping around from the neck with a plastic sheet cover?

A. Not really.

Q. Okay. Have you noticed a change -- change in temperature when the Bair Hugger is on?

A. No.

Q. Now number nine says, "Often other power sources for special blades used in some surgeries (more often revisions) for burring bone, cement, et cetera - Anspach/Midas Rex devices generates a tremendous amount of heat."

Do you agree with me the heat that these devices produce are above the operating room table; correct?

A. Yes. Some of the -- some of these are plugged into a wall that could be like, say, on the -- there could be a wall outlet. So, for example, the Anspach device is plugged into a wall, but I don't think that's generating that much heat. It could be creating currents --

Q. Well the ones --

A. -- as it's moved around.

Q. Well the ones that generate a tremendous amount of heat, those are above the operating room table; correct?

A. Well an Anspach device --
I would say yes, that's correct.
Q. Okay. And sitting here today, you don't know the exact amount of heat that they produce; correct?
A. Correct.
Q. Okay. Standard elect -- electrocautery devices, those produce heat above the operating room table; correct?
A. Correct.
Q. And sitting here today, you don't know what -- the amount of heat that they produce; correct?
A. I know how many degrees that a -- in a general sense that an electrocautery hits when it's turned on. It's like between three and five hundred degrees Fahrenheit. It's pretty --
Q. But when you're asked about watts or BTUs --
A. No, I don't -- I don't know that.
Q. Okay. And you don't know whether or not that quick burst of heat affects the unidirectional flow in an operating room; do you?
A. No.
Q. Okay.
A. I'll defer that.
Q. And -- and in fact you don't know --

I mean based on your education, training and experience, you haven't studied the effects of heat on unidirectional flow in an operating room; have you?

A. The effects of heat on unidirectional flow. No.

Q. Okay. Number 11, "Ancillary cautery devices - Plasmablade, Aquamantis, Canady, and others." You agree with me that all those devices produce heat above the operating room table; correct?

A. Correct.

Q. And sitting here today, you have no idea --

A. I'm going to say that I haven't studied that question about heat and everything like that, but I have read these articles and I see what -- the arguments that are made, so I -- I can still render certain opinions.

Q. Okay. And I can read orthopedic articles and render opinions as well in a court of law; correct?

A. Yes.

Q. Okay. Is that the standard --

MR. C. GORDON: Object to the form --

Q. -- that you're going by?

MR. C. GORDON: Object to the form of the question, --

A. No.
Q. Okay.
MR. C. GORDON: -- lack of foundation.
Q. Okay. Let's talk about --
So you agree with me that under 11, you don't know how much heat they produce; correct?
A. Can I say -- I --
In terms of what goes on in an operating room, I'm still the primary important person or the primary person in charge, that I have to theoretically be aware of not only my discipline but the anesthesiologist, except certain things, but be aware and understand other things. So I don't have to be the absolute expert on every single topic, but I still can have an opinion about them and I -- and I think that's very appropriate.
MR. ASSAAD: Move to strike as non-responsive to a non-existent question.
Q. Number 11, you agree with me that the devices under number 11 on page 11 of Exhibit 5, you don't know how much heat those devices produce; correct?
A. I don't know exactly.
Q. Okay. Number 12, "Various ancillary devices in the operating room by anesthesiologist, example,

defibrillator, computer, their monitor, their anesthesia machine is a source of heat."

Sitting here today, you agree that none of those devices produce heat underneath the operating room table; correct?

A. I wouldn't know that --

Q. Okay.

A. -- one way or the other.

Q. And sitting here today, you don't know how much heat those devices produce; correct?

A. Correct.

Q. Okay. So don't you think it would be important to know the exact amount of heat being produced by these devices to offer an opinion as to whether or not they have an effect, if any, greater or less than the Bair Hugger device?

A. So my answer is once I knew that the four players that are involved in the surgery generate way more heat than -- directly to the patient than a Bair Hugger device, which is feet away, and that amount of heat would be dissi -- dissipated by the inverse of the distance, then to me all these other things were just further additive events and I didn't feel that I had to study and give you a -- a number for each of these answers. Nor do I feel that it -- it

necessarily matters whether it's below the table or above the table. I'm way more interested in heat that's generated right to the wound, which is the point of interest.

I certainly don't think that if I had spent a bunch more hours and been able to give you much better answers that would have been --

Well anyway, so that's why I felt that this was appropriate. These are the different devices that generate heat. I'd be happy to go and -- and read back these questions and give exact numbers and give a much better answer, but my basis of using that opinion was that I already knew that direct heat involvement and what a patient sees, which is what I'm worried about is what's happening in that wound, in that knee replacement or hip replacement, that is way more important in what's hitting that patient than things so far away. And that --

MR. ASSAAD: Move to strike as -- I'm sorry. Move to strike as non-responsive.

Q. What methodology -- well strike that.

Does the location of where the heat is produced, was that any part of your methodology in formulating your opinions?

A. I just told you it was. It even says it

directly with the probability of surgical-site infection?"

Consensus answer: "We recognize the probability of SSI correlates directly with the quantity of bacteria that reach the wound. Accordingly, we support strategies to lower particulate and bacterial counts at surgical wounds."

Would you agree, disagree, or abstain?

A. Well I just told you if -- it's -- what my answer was. You do want to reduce bacteria. That's what we -- that's what we're trying to do.

Q. And lower --

A. But your question was different than mine.

Q. I'm reading directly from the concensus.

A. No, no. Now I --

Oh. With that answer, I agree with that.

Q. Okay. So -- so you would say --

A. Oh, oh, I definitely agree with that.

Q. Okay.

A. Not the first question, which was not phrased that way.

Q. And I'm reading directly from the concensus.

A. Yeah, of course.

Q. So you agree --

A. I agree with that.

Q. Okay. Are you -- are you aware that 93 percent agree with that statement?

A. That's fine.

Q. Okay. And only five percent disagree.

A. I don't think it's terribly bad. I think that's fine.

Q. But you agree the 93 percent agreement according to the consensus, that's a strong consensus.

A. That's a very strong consensus.

Q. Okay. You agree with me that the majority of PJIs, periprosthetic joint infections, are initiated through the introduction of microorganisms at the time of surgery.

A. Yes.

Q. Okay.

A. Is that one of the --

Oh, never mind.

Q. Why would you abstain, by the way, from --

A. I'm -- I'm only abstaining right now because I don't know the context of what was being discussed since all those questions, they were part of group discussions and meetings.

Q. Okay.

A. And as I said, that, you know, whether it comes directly on the skin or from the air, I don't

I would --

Q. And you would --

A. -- I might agree with them the way it was presented.

Q. You would agree with me that after disruption in the unidirectional flow, the instruments and even the hands of the surgeon might be contaminated; correct?

A. Potentially.

Q. Okay. And you would also agree with me that if the implant is uncovered, that any disruption in the unidirectional airflow could cause the implant to become con -- contaminated; correct?

A. Correct.

Q. Okay. On page six --

MR. ASSAAD: Doctor, I have about one hour left, and I'd appreciate your attention --

THE WITNESS: I'm sorry.

MR. ASSAAD: -- to the deposition instead of --

THE WITNESS: Okay.

MR. ASSAAD: -- being on your phone.

Q. On page six of Exhibit 5, bottom of the first paragraph, it says, "...turbulent air systems are not sensitive to airflow disruption in the manner

I don't want you to look, but you, sitting today, you -- I mean you can't cite the name of the article sitting here right now this instant.

A. No.

Q. Okay. Do you agree with me that you need fewer CFUs to cause a periprosthetic joint infection than a superficial wound infection? Correct?

A. Correct.

Q. Okay. You just disagree with our experts that you only need one.

A. That could be a little bit of a semantic. Are we talking one growing to a million or --

Generally, inoculums, when you have small inoculums that are in the hundreds or thousands, they don't create infections. I did some of this work that wasn't published with fracture work myself personally. When you had small inoculums of bacteria, no infections occurred even though -- and there were -- and there were like thousands in fracture-healing scenarios, so I know that you could -- any one could turn into a million, but in a general --

When we're talking about creating an infection, you need -- in many of these, even the animal models that I cited, it was still like a thousand before that was inoculated, before infections

A. Yes.

MR. C. GORDON: Object to the form of the question.

Q. And if you found out that a device was bringing up that bioburden from underneath the operating room table and putting it over the surgical site, would that cause you any concern?

A. That would cause me concern.

Q. Okay. Because you would agree with me that particles -- there's a high probability of particles underneath the operating room table, some of them are going to contain pathogens.

A. No. They're --

We've just done an experiment where we were using a BioTrack device, which is evaluating bioactive particles, and we're finding that there's only like one in a thousand particles are -- are -- have bacteria in them. Low amount. And then it also has different size particles, and some particles I wouldn't be concerned about if they are -- because they wouldn't be harboring bacteria. I don't think they would be harb -- harboring virus; I'm not worried about viral infections. So if they're particles that are under .3 microns or something like that, I'm not that worried about that.

it did have an effect on contaminating the sterile field, you agree then it would be a defective product; correct?

MR. C. GORDON: Object to the form of the question, calls for a legal conclusion.

THE WITNESS: Does that mean I answer it?

MR. ASSAAD: Yes.

MR. C. GORDON: It's whatever you can answer.

A. If a device -- am I allowed to answer -- causes bacteria into a sterile field, would I agree that we shouldn't be using that device? Is that your question?

Q. Yes.

A. Yes.

Q. Okay. Now I noticed that you comment in your report -- on pages 13 and 14, 15 and 16 -- on the McGovern article; correct?

A. Yes.

Q. All right. You mentioned that the McGovern article could be explained by the Hawthorne effect. Do you remember saying that in your report?

A. Yes.

Q. Sitting here today, have you talked to any of the -- any of the physicians or researchers that